

AMENDMENTS TO THE CLAIMS

A detailed listing of all claims that are, or were, in the present application, irrespective of whether the claim(s) remains under examination in the application are presented below. The claims are presented in ascending order and each includes one status identifier. Those claims not cancelled or withdrawn but amended by the current amendment utilize the following notations for amendment: 1. deleted matter is shown by strikethrough; and 2. added matter is shown by underlining.

Claims 1-17 (Cancelled).

Please add new claims 18-36 as follows:

18. (New) A method of determining a spatial position of an object, comprising the steps of:

mounting three light sources on the object so that the three light sources define apices of a triangle;

illuminating the light sources;

simultaneously recording the object and the illuminated light sources from a first and a second position;

capturing the positions of the light sources in recorded images from the first and second positions; and

computing the position of the object based upon positions of the illuminated light sources in the recorded images.

19. (New) The method as claimed in Claim 18, further comprising the step of separating images of the illuminated light sources from a remaining image background.

20. (New) The method as claimed in Claim 18, further comprising the steps of:  
extinguishing the light sources prior to the computing step;  
recording the object from the first and second positions at the same time while the light sources are turned off;  
subtracting the image recorded while the light sources were turned off from the image recorded while the light sources were turned on in the evaluating step to determine the positions of the light sources for each recording position.

21. (New) The method as claimed in Claim 18, wherein, in the mounting step, more than three light sources are mounted on the object and only three light sources are illuminated during the illuminating step.

22. (New) The method as claimed in Claim 21, further comprising the step of selecting the three light sources which define apices of a largest triangle that can be recorded from both positions and  
illuminating the three light sources that define the apices of the largest triangle.

23. (New) The method as claimed in Claim 18, further comprising the step of operating the light sources in a pulsed manner.

24. (New) The method as claimed in Claim 23, further comprising the steps of:  
synchronizing the simultaneous recording from both positions with the pulsed operation of the light sources such as to alternately obtain a first pair of recorded images with illuminated light sources and a second pair of recorded images with nonilluminated light sources; and  
determining the light source positions on the basis of two subsequent pairs of first and second pairs of recorded images.

25. (New) The method as claimed in Claim 18, further comprising the steps of:  
illuminating the light sources individually and sequentially; and  
sequentially recording each individually illuminated light source to identify each light source.

26. (New) The method as claimed in Claim 18, further comprising the step of controlling the light sources in a wireless manner.

27. (New) A device for sensing the spatial position of an object, said device comprising:  
three light sources mounted on the object to define the apices of a triangle;

two spaced apart image-recording devices each having an image recording area, the image recording devices being oriented such that the image-recording areas overlap;

a control device capable of illuminating the light sources and activating the two recording devices simultaneously to record images the object and the illuminated light sources; and

an evaluating unit, capable of determining positions of the light sources in the recorded images and computing a position of the object on the basis of the determined positions of the light sources.

28. (New) The device as claimed in Claim 27, wherein the evaluating unit separates the images of the light sources from remaining image background to determine the positions of the light sources.

29. (New) The device as claimed in Claim 27, wherein the control device is capable of extinguishing the light sources and activating the recording devices to simultaneously record an image of the object with the light sources extinguished by both image-recording devices, and the evaluating unit is capable of subtracting the image recorded with the extinguished light sources from the image recorded with the illuminated light sources, to determine positions of the light sources.

30. (New) The device as claimed in Claim 27, further comprising a control unit operably connected to the light sources, the control unit being capable of controlling the light sources on the basis of signals wirelessly transmitted by the control device; and

a power supply for the light sources.

31. (New) The device as claimed in Claim 27, wherein the light sources comprise light emitting diodes.

32. (New) The device as claimed in Claim 27, wherein the light sources comprise infrared-light emitting diodes.

33. (New) The device as claimed in Claim 27, wherein the object comprises a head mountable display unit that can generate an image that is perceivable by a wearer of the head mountable display.

34. (New) The device as claimed in Claim 27, wherein the light sources are connected with the object in a stationary manner.

35. (New) The device as claimed in Claim 27, wherein the light sources emit light at a pre-determined emission spectrum and the recording devices selectively accept light within the pre-determined emission spectrum.

36. (New) The device as claimed in Claim 35, wherein each recording device further comprises a filter, said filter allowing light to pass only if it is within the pre-determined emission spectrum.